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EXAMINER	
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ART UNIT	**PAPER NUMBER**
2141	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/761,347	OBA ET AL.	
	Examiner	Art Unit	
	Nicholas R. Taylor	2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 March 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21 and 25-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5,7-21 and 25-27* is/are rejected.

7)☒ Claim(s) *4 and 6* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-21 and 25-27 have been presented for examination. Claims 1-3, 5, 7-21, and 25-27 are rejected. Claims 4 and 6 are objected to.

2. The proposed amendments to the specification filed on March 21st, 2007, are approved.

Response to Arguments

3. Applicant's arguments filed March 21st, 2007, have been fully considered but they are deemed not persuasive.

4. In the remarks, applicant argued in substance that:

(A) The statutory section given for the 35 U.S.C §102 rejection under Boden was improperly listed.

As to point (A), the Examiner thanks the applicant for giving notice of this typographical error. The cited portion of the statute (below) has been updated to reflect this correction. As the rejection was proper under 35 U.S.C. 102 the rejection will not be withdrawn.

(B) The prior art of Boden does not teach sending serving network provider advertising information to said client node, as any relevant advertising information is removed into the VPN NAT bind table or moved into a different portion of the incoming packet.

As to point (B), Boden teaches an incoming IPsec'd packet 100 containing network provider advertising information is received at the access router (Boden, paragraph 0062). The access router, in order to avoid conflict due to overlapping remote address spaces, makes modifications to the incoming advertisement information so that conflicts do not occur on the destination network (see Boden paragraphs 0062-0072 and the connection process detailed in Table 3 where gateway A modifies the advertisement information to be compatible with node A1's network). The access router then sends this information on to the client node. The client node responds if a connection is desired, and if so, a communication tunnel is established where the client node is able to send and receive data packets to the desired destination (Boden, see fig. 13 steps 188-194 where the advertising information in step 181 is forwarded to node A1 to establish the connection). Additionally, language limiting the prior art from making modifications to transferred network advertising information is not present in the rejected claims.

Allowable Subject Matter

5. Claims 4 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 2, 5, 9, 10, 13, 17, 18, 20, 21, and 25-27 rejected under 35 U.S.C. 102(e) as being anticipated by Boden et al. (U.S. PGPub 2003/0145104).

8. As per claim 1, Boden teaches a method of dynamically connecting a client node to a serving network, comprising the steps of:

providing an access network to which a client node has a network connection; (Boden, fig. 4 item 42 and Node A1)

providing at least one access router having a network connection to said access network and having a network connection to at least one serving network; (Boden, paragraph 0039; see fig. 4 item 52)

sending serving network provider advertising information to said client node; receiving from said client node serving network provider information specifying a serving network to which said client node desires access; and (Boden, paragraphs 0062-0072)

establishing a communication tunnel between said client node and said access router through said access network, such that said client node is able to send and receive data packets to and from the serving network specified by said client node within said communication tunnel through said access network (Boden, paragraphs 0073-0076; fig. 5 and 12).

9. As per claim 2, Boden teaches the system comprising the step of authenticating said client node prior to establishing said communication tunnel (Boden, paragraphs 0050-0052 and fig. 9, through the use of IPsec).

10. As per claim 5, Boden teaches the system further wherein said access router has network connections to at least two serving networks, said method further comprising the step of establishing a second communication tunnel between said client node and said access router through said access network, such that said client node is able to selectively send and receive data packets to and from each of said two serving networks (Boden, paragraph 0039 and fig. 4).

11. As per claim 9, Boden teaches the system further wherein said at least one serving network comprises an Internet Service Provider network (Boden, paragraph

0078-0081 where the gateway of fig. 4 has access to sites other than other listed remote VPNs).

12. As per claim 10, Boden teaches the system further wherein said at least one serving network comprises a Network Access Provider network (Boden, paragraph 0078-0081 where the gateway of fig. 4 has access to sites other than other listed remote VPNs).

13. As per claim 13, Boden teaches the system further wherein said access network comprises an IP access network (Boden, paragraphs 0034-0038).

14. As per claim 17, Boden teaches the system further wherein said client node connects to said access network via a remote network (Boden, fig. 4 item 42).

15. As per claim 18, Boden teaches the system further wherein the step of establishing said communication tunnel comprises the step of using an IPSec key management protocol (Boden, paragraphs 0050-0052 and fig. 9, through the use of IPsec).

16. As per claim 20, Boden teaches the system further wherein said communication tunnel is a secure communication tunnel (Boden, paragraphs 0050-0052 and fig. 9, through the use of IPsec).

17. As per claim 21, Boden teaches the system comprising the step of establishing said secure communication tunnel using an IPSec key management protocol (Boden, paragraphs 0050-0052 and fig. 9, through the use of IPsec).

18. As per claim 25, Boden teaches a method of connecting a client node to a serving network, comprising the steps of:

providing an access router having a network connection to at least two serving networks; (Boden, paragraph 0039; see fig. 4 item 52)

receiving from said client node serving network information specifying a serving network to which said client node desires to have access; (Boden, paragraphs 0062-0072)

establishing a communication tunnel between said client node and said access router through said access network, such that said client node is able to send and receive data packets to and from the serving network specified by said client node within said communication tunnel through said access network; and (Boden, paragraphs 0073-0076; fig. 5 and 12)

binding said communication tunnel to said specified serving network by using serving network information of said specified serving network as a security association identifier of said communication tunnel (Boden, paragraph 0044 and figure 9 SA identifier).

19. As per claim 26, Boden teaches the system further wherein said communication tunnel is a secure communication tunnel (Boden, paragraphs 0050-0052 and fig. 9, through the use of IPsec).

20. As per claim 27, Boden teaches the system further comprising the step of establishing said secure communication tunnel using an IPSec key management protocol (Boden, paragraphs 0050-0052 and fig. 9, through the use of IPsec).

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

22. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boden et al. (U.S. PGPub 2003/0145104) and Sakov et al. (US PGPub 2002/0196802)

23. As per claim 3, Boden teaches the above yet fails to teach the system comprising the step of providing a second access router having a network connection to said access network and having network connections to at least two serving networks.

Sakov teaches the use of multiple access routers having network connections to an original access network and multiple serving networks (Sakov, paragraph 0029-0035).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have combined Boden and Sakov to provide the access routers of Sakov in the system of Boden, because doing so would allow the aggregation of any excessive routers and would increase performance (Sakov, paragraphs 0013-0015)

24. Claims 8, 11, 12, 14-16, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boden et al. (U.S. PGPub 2003/0145104) and Forslöw (U.S. PGPub 2002/0069278).

25. As per claim 8, Boden teaches the above yet fails to teach wherein said step of sending serving network provider advertising information comprises the step of using a Router Discovery mechanism.

Forslöw teaches authenticating clients prior to establishing IPSec secure communication tunnels (Forslöw, paragraphs 0093 and 0108) in a wireless VLAN network (Forslöw, paragraph 0094) that utilizes a Router Discovery mechanism (Forslöw, claim 85).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have combined Boden and Forslöw to provide the networking system of Forslöw in the system of Boden, because doing so would enable the benefits of a mobile virtual private network providing secure client data access in an IPsec based system (Forslöw, paragraph 0065).

26. As per claim 11, Boden teaches the above yet fails to teach wherein said at least one serving network comprises a VLAN network.

Forslöw teaches authenticating clients prior to establishing IPSec secure communication tunnels (Forslöw, paragraphs 0093 and 0108) in a wireless VLAN network (Forslöw, paragraph 0094).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have combined Boden and Forslöw to provide the networking system of Forslöw in the system of Boden, because doing so would enable the benefits of a mobile virtual private network providing secure client data access in an IPsec based system (Forslöw, paragraph 0065).

27. As per claim 12, Boden-Forslöw teaches the system further comprising the step of providing a virtual access point in said VLAN serving network, through which a client node may connect directly to said VLAN serving network (Forslöw, paragraph 0094).

28. As per claim 14, Boden teaches the above yet fails to teach wherein said access network comprises a VLAN access network.

Forslöw teaches authenticating clients prior to establishing IPSec secure communication tunnels (Forslöw, paragraphs 0093 and 0108) in a wireless VLAN network (Forslöw, paragraph 0094).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have combined Boden and Forslöw to provide the networking

system of Forslöw in the system of Boden, because doing so would enable the benefits of a mobile virtual private network providing secure client data access in an IPsec based system (Forslöw, paragraph 0065).

29. As per claim 15, Boden-Forslöw teaches the system further wherein said VLAN access network is partitioned into multiple VLAN access sub-networks (Forslöw, paragraph 0104).

30. As per claim 16, Boden-Forslöw teaches the system further comprising the step of providing a virtual access point in said VLAN access network, through which a client node may connect to said VLAN access network (Forslöw, paragraph 0094).

31. As per claim 19, Boden teaches the above yet fails to teach wherein said client node is a mobile node, and said network connection of said client node to said access network is a wireless connection.

Forslöw teaches authenticating clients prior to establishing IPSec secure communication tunnels (Forslöw, paragraphs 0093 and 0108) in a wireless VLAN network (Forslöw, paragraph 0094).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have combined Boden and Forslöw to provide the networking system of Forslöw in the system of Boden, because doing so would enable the benefits

of a mobile virtual private network providing secure client data access in an IPsec based system (Forslöw, paragraph 0065).

32. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boden et al. (U.S. PGPub 2003/0145104) and Le et al. (US PGPub 2004/0019664).

33. As per claim 7, Boden teaches the above yet fails to teach wherein said step of sending serving network provider advertising information comprises the step of using a PANA protocol.

Le teaches the use of a PANA protocol in advertising network elements (Le, paragraphs 0039-0044).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have combined Boden and Le to provide the PANA protocol of Le in the system of Boden, because doing so would enable PANA based advertisements.

Conclusion

34. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Taylor whose telephone number is (571) 272-3889. The examiner can normally be reached on Monday-Friday, 8:00am to 5:30pm, with alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571) 272-3880. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nicholas Taylor
Examiner
Art Unit 2141

RUPAL DHARIA
SUPERVISORY PATENT EXAMINER